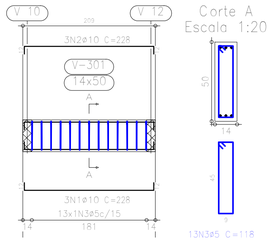
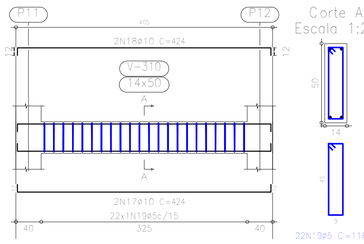
Cobertura
Desenho de vigas
Concretos: C25, usina;rigor
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

V 1
Escala 1:50



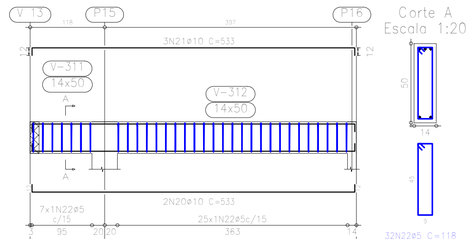
Corte A
Escala 1:20

V 3
Escala 1:50



Corte A
Escala 1:20

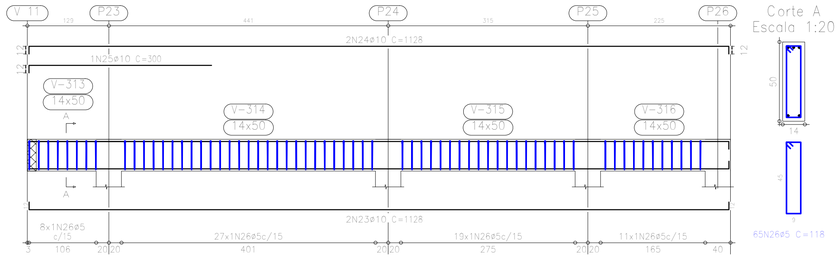
V 4
Escala 1:50



Corte A
Escala 1:20

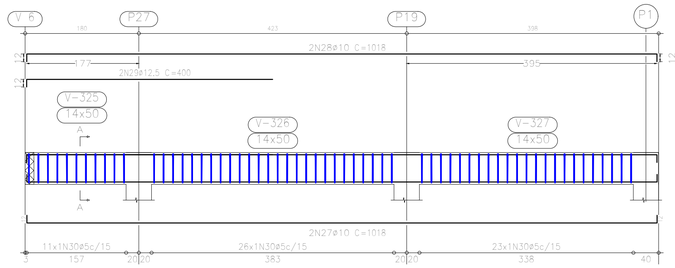
Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 1	1	ø10	3	12	204	12	228	684	4,3	
	2	ø10	3	12	204	12	228	684	4,3	
	3	ø5	13				118	1534		2,4
								Total+10%:	9,5	2,6
V 2	4	ø10	2		1188	12	1200	2400	15,1	
	5	ø12,5	5	15	738	15	768	3840	37,7	
	6	ø10	2	12	688	12	712	1424	8,9	
	7	ø12,5	3	15	614	15	644	1932	19,0	
	8	ø10	2	12	288		300	600	3,8	
	9	ø10	2		1205		1205	2410	15,1	
	10	ø10	2		300		300	600	3,8	
	11	ø12,5	5		885	15	900	4500	44,2	
	12	ø10	2	12	1188		1200	2400	15,1	
	13	ø12,5	6	23	738	24	785	4710	46,2	
	14	ø5	119				118	14042		22,0
	15	ø5	38				138	5244		8,2
	16	ø6,3	48				161	7728	19,1	
								Total+10%:	250,8	33,2
V 3	17	ø10	2	12	400	12	424	848	5,3	
	18	ø10	2	12	400	12	424	848	5,3	
	19	ø5	22				118	2596		4,1
								Total+10%:	11,7	4,5
V 4	20	ø10	2	12	509	12	533	1066	6,7	
	21	ø10	3	12	509	12	533	1599	10,0	
	22	ø5	32				118	3776		5,9
								Total+10%:	18,4	6,5
V 5	23	ø10	2	12	1104	12	1128	2256	14,2	
	24	ø10	2	12	1104	12	1128	2256	14,2	
	25	ø10	1	12	288		300	300	1,9	
	26	ø5	65				118	7670		12,0
								Total+10%:	33,3	13,2
V 7	27	ø10	2	12	994	12	1018	2036	12,8	
	28	ø10	2	12	994	12	1018	2036	12,8	
	29	ø12,5	2	12	388		400	800	5,0	
	30	ø5	60				118	7080		11,1
								Total+10%:	30,9	12,2
								ø5:	0,0	72,2
								ø6,3:	21,0	0,0
								ø10:	171,8	0,0
								ø12,5:	161,8	0,0
								Total:	354,6	72,2

V 5
Escala 1:50

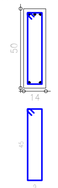


Corte A
Escala 1:20

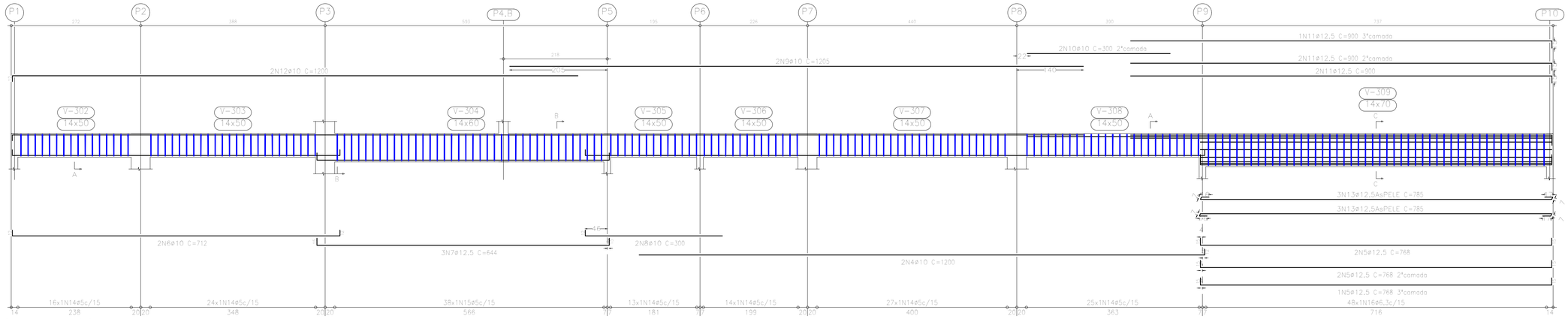
V 7
Escala 1:50



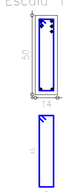
Corte A
Escala 1:20



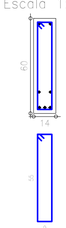
V 2
Escala 1:50



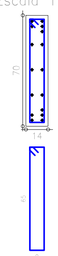
Corte A
Escala 1:20



Corte B
Escala 1:20



Corte C
Escala 1:20



Resumo Aço Cobertura Vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50-A	ø6,3	77,3	21	
	ø10	561,7	388	
	ø12,5	166,3	180	589
CA-60-B	ø5	943,3	163	163
Total				752

Pilar ou muro apoiado:P4,B

Ver esperas no detalhamento de pilares ou vista de muros

HAMILTON LIMA PAULA:00251548694 8694
Assinado de forma digital por HAMILTON LIMA PAULA:00251548694
Dados: 2026.08.06 13:18:29 -03'00'

PROP	ASS HAMILTON LIMA PAULA – PREFEITO MUNICIPAL	PREFEITURA MUNICIPAL DE MARLIÉRIA/MG	ESCALA INDICADAS
RT	ASS LUIZ JOSE DE FREITAS:34506853687 Assinado de forma digital por LUIZ JOSE DE FREITAS:34506853687 Dados: 2026.08.06 11:18:53 -03'00' LUIZ JOSÉ DE FREITAS – CREA MG 177.128/D	DATA:09/2026 VISTO	PROJETO: REGIONAL DE CAVA GRANDE
DES.	APROV.	APROV.	CONTEUDO: ARMAÇÃO DE VIGAS DA COBERTURA
CONF.:	DATA:		LOCALIDADE: CAVA GRANDE MARLIÉRIA – MG
			NÚMERO: FOLHA 13/15
			SEM ESCALA ESTR.